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November 20, 1992

Tenneco Minerals
P.O. Box 2650
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Attention: Mr. Jim Smith, Mine Manager

ANNUAL INSPECTION OF SEDIMENT POND DAM
GOLDSTRIKE MINE
WASHINGTON COUNTY, UTAH
FOR TENNECO MINERALS

1.0 INTRODUCTION

The Sediment Pond Dam was constructed as a part of the emergency control of surface and process water from the Goldstrike Facility. No water was collected in the reservoir until early 1991. The water at that time seeped from the bottom of the reservoir and surfaced at the downstream toe of the dam. There was less than 50 gallons per minute of flow, but it was slightly muddy. These conditions raised questions in the minds of the State of Utah regulatory agencies and Tenneco was requested to evaluate both the flood storage capacity and the seepage problem.

Tenneco proceeded to evaluate the seepage problem and the storage requirements. Plans were prepared and construction undertaken to raise the spillway elevation and the dam five feet. During the

time the embankment was being raised, the seepage from the pond had stopped due to silting of the pond bottom from floods that occurred. There has been no attempt made to add clay reinforcing to the silt liner. The reservoir has contained water continusuly for the past year, and yet there has been no seepage observed.

2.0 OBSERVATIONS

On November 17,1992, Mr. Toland inspected the Sediment Pond Dam as a part of an overall geotechnical evaluation of the Tenneco mining operation. Photographs of the dam are presented on Plates 1 through 3.

The crest of the dam is now being used as a haul road and the emergency spillway has been replaced by two 24-inch pipes (see Photographs 1 and 2). The spillway will be re-established when the pit in the area of the dam is completed.

The seepage problem described previously was not present at the time of this inspection. Photograph 4 shows the upstream toe of the dam where flood-carried silt has sealed the voids in the dozer placed fill. Photograph 6 shows the area where seepage was occurring in 1991.

There is no indication that the use of the dam by ore trucks has caused any movement or problems with the dam embankment. The 1991 and 1992 rainfall has been far above normal at the Goldstrike Mine. The reservoir should not store water in normal rainfall years.

1.3 CONCLUSIONS AND RECOMMENDATIONS

The Sedimentation Pond Dam and reservoir is performing well. There were no indications of stability or seepage problems. The seepage problem observed in 1991 was not a structural concern to

the dam. This seepage has not occurred for more than a year and there is no indication that it will re-occur.

Tenneco Minerals personnel should continue to observe the dam and reservoir, and should report any seepage or embankment movement to our office. The spillway should be re-established as soon as the mining in the area is completed.

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Respectfully submitted,

George C Toland

George C. Toland, PE 2311, State of Utah

GCT/hbt

ATTACHMENTS:

Plates 1 through 3 Photographs

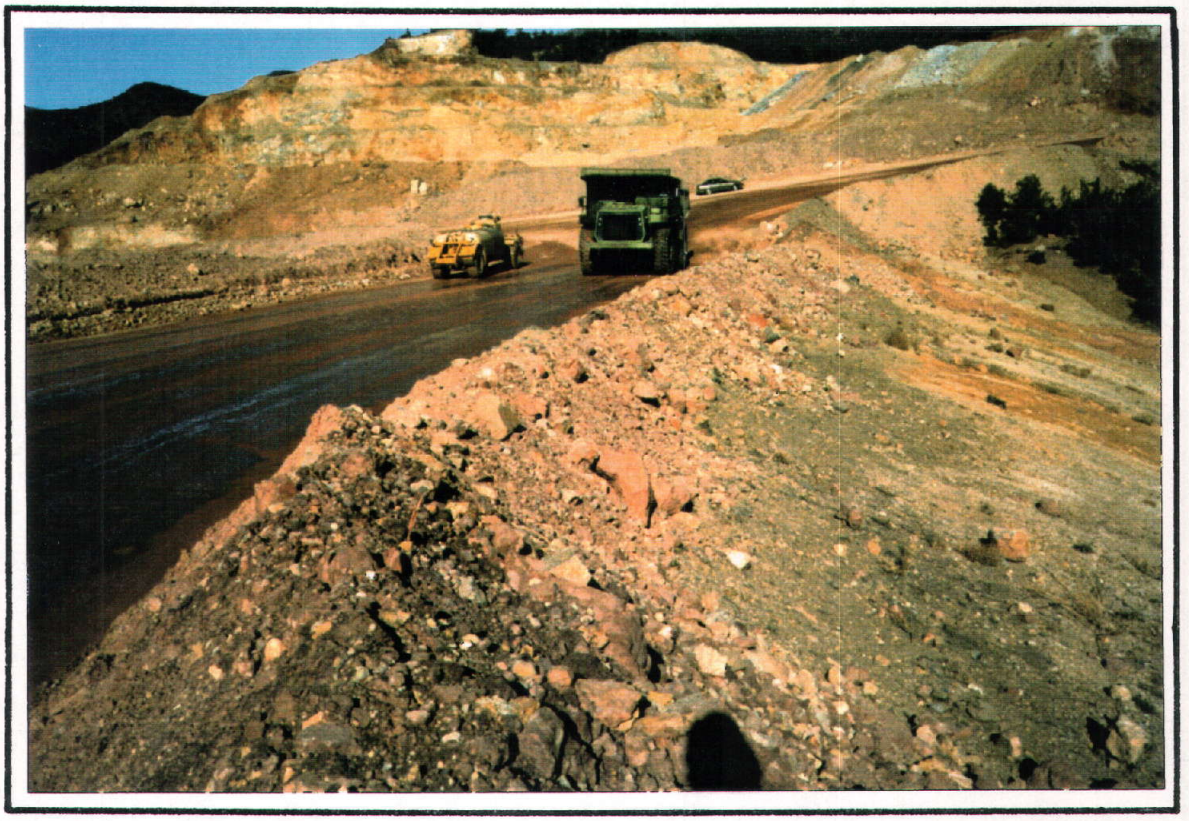

PHOTO 1: CREST OF DAM, CURRENTLY USED AS HAUL ROAD.

PHOTO 2: SPILLWAY AREA WITH PIPES. WILL BE RE-BUILT AFTER MINING.

PHOTOGRAPHS

PHOTO 3: UPSTREAM SLOPE OF DAM AND WATER IN POND.

PHOTO 4: WATER IN POND AND SILTED AREA OF FACE.

PHOTOGRAPHS

PHOTO 5: DOWNSTREAM SLOPE OF DAM.

PHOTO 6: DOWNSTREAM TOE OF DAM WHERE SEEPAGE OCCURED IN 1991.

PHOTOGRAPHS